

REMARKS

In the present Office Action, claims 1-42 were pending before the Office. Of these, claims 1, 6, 10, 12, 17, 22, 26, 28, and 33 were the only independent claims.

Claims 1-42 were rejected under § 103.

The Examiners rejections are traversed below.

I. CLAIM REJECTION UNDER 35 U.S.C. § 103

A. Claims 1 and 3-5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2002/0029286 to *Gioquindo et al.* (hereinafter "*Gioquindo*") in view of U.S. Patent Publication No. 2002/0091786 to *Yamaguchi et al.* (hereinafter "*Yamaguchi*"). Applicants respectfully traverse this rejection for at least the reasons discussed below.

Independent claim 1 recites, *inter alia*, transferring, via a processor including executable code that is usable to send partition information from a partition management tool to a hosting partition, a frame or packet from an adapter cache memory to a receive queue of each of one or more partitions to which the frame or packet is to be sent.

Gioquindo relates to communication between multiple partitions employing a host-network interface and discusses an arrangement in which partitions 113, 115 and 117 use a communication adapter 120 to communicate amongst themselves and between themselves and a network as illustrated in FIG. 3 of *Gioquindo*. However, the Office Action concedes *Gioquindo* does not teach "transferring, via a processor including executable code that is usable to send partition information from a partition management tool to a hosting partition." Therefore the Office Action relies on Figure 1 and paragraph 0038 of *Yamaguchi* to teach these features.

However, the cited passage in *Yamaguchi* discloses:

"A hypervisor program 171, which is **a control program for controlling a single physical computer to operate as a plurality of LPARs**, operates on the LPAR load-balancing Web server, and a separate operating system (OS) operates on each LPAR under control thereof. Although the drawing schematically shows that the hypervisor program 171 and the logical partitions, LPAR0 180b to LPAR8 188b, are linked by logical paths 180d to 188d, in reality, when an LPAR issues a command by way of the hypervisor program 171, for the purpose of using hardware, for example, the hypervisor program 171 is executed on the one of the IPs 1000 to 1008 corresponding to the LPAR that issued the command." (**emphasis added**)

Note, the cited passage does not teach "executable code that is usable to send partition information." The hypervisor program disclosed by *Yamaguchi* is a **control program for controlling a single physical computer to operate as a plurality of logical partitions**. This is not the same as **code that is usable to send partition information**. Instead *Yamaguchi* provides code to allow a physical computer to "act" as a plurality of logical partitions.

Therefore, the combination of *Gioquindo* in view of *Yamaguchi* fails to disclose the present invention. Thus, even in view of the knowledge of one of ordinary skill in the art, the asserted combination is deficient.

Accordingly, favorable reconsideration and withdrawal of the rejection of independent claim 1 and dependent claims 3-5 under 35 U.S.C. § 103 are respectfully requested.

B. Claims 2 and 36 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Gioquindo* in view of *Yamaguchi* and further in view of U.S. Patent Publication No. 2003/0149844 to *Duncan et al.* (hereinafter "*Duncan*").

The Office Action asserts that *Gioquindo* is "admitted prior art," however the Applicant respectfully submits that no

such admission has been made. Applicant respectfully request that the Examiner retract this statement.

Claims 2 and 36 depend directly or indirectly from claim 1. The rejection of claim 1 is traversed in the discussion under section "A." above. *Duncan* fails to cure the deficiencies of *Yamaguchi* and *Gioquindo*, therefore, it is respectfully submitted that claims 2 and 36 are also in condition for allowance.

C. Claims 6-9, 22-25, 37, and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable in view of U.S. Patent Publication No. 2003/0236852 to *Fernandes et al.* (hereinafter "*Fernandes*") in view of *Yamaguchi* in view of *Gioquindo* and further in view of U.S. Patent No. 5,956,714 to *Condon* (hereinafter "*Condon*").

Independent claim 6 recites, *inter alia*, transferring, via a processor including executable code that is usable to send partition information from a partition management tool to a hosting partition, a frame or packet corresponding to a selected partition from a transmit queue of the selected partition to an adapter cache memory.

Independent claim 22 recites a similar feature in apparatus form.

The primary citation to *Fernandes* relates to sharing a network adapter among multiple logic partitions in a data processing system and discusses an arrangement in which a network adapter 225 permits logic partitions 201a and 201b to communicate. As FIG. 2 of that patent illustrates and the Office Action concedes, however, *Fernandes* does not teach transferring a frame or a packet from the network adapter (alleged to be a multiple queue Ethernet adapter) to a partition in the manner recited by claim 6. Therefore the Examiner relies upon *Yamaguchi* to disclose these features. However, *Yamaguchi* fails to disclose these features as recited in section "A." above.

The secondary citation to *Gioquindo*, for reasons similar to those discussed above, does not remedy the aforementioned deficiency in *Yamaguchi*. Also, the tertiary citation to *Condon*, cited for various other features, does not add anything that would remedy the aforementioned deficiency in the combination of *Fernandes* and *Gioquindo*. Thus, even in view of the knowledge of one of ordinary skill in the art, the asserted combination is deficient.

Accordingly, favorable reconsideration and withdrawal of the rejection of independent claims 6 and 22 under 35 U.S.C. § 103 are respectfully requested.

Claims 7-9, 37, and 41-42 depend directly or indirectly from claim 6. Similarly, claims 23-25 and 40 depend directly or indirectly from claim 22. These dependent claims are patentable for at least the reasons stated above. Therefore, favorable reconsideration and withdrawal of the rejection of the rejection of claims 7-9, 23-25, 37 and 40-42 under 35 U.S.C. § 103 is respectfully requested.

D. Claims 10, 11, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable in view of *Fernandes* in view of U.S. Patent Publication No. 2004/0202189 to *Arndt et al.* (hereinafter "*Arndt*") and further in view of *Gioquindo* and further in view of U.S. Patent No. 6,854,021 to *Schmidt et al.* (hereinafter "*Schmidt*").

Independent claim 10 recites, *inter alia*, employing a receive queue and a transmit queue for each of a plurality of partitions included in a computer system and, for at least one partition, employing at least two receive queues and two transmit queues.

Independent claim 26 recites a similar feature in apparatus form.

The Office Action concedes *Fernandes* does not teach "*at least one partition employs at least two receive queues and two*

transmit queues." Therefore, the Office Action relies on Arndt to teach these features. The Office Action cites Figure 12 and paragraph [0133] for teaching these features. However, Figure 12 and paragraph [0133] fails to teach "... at least one partition, employing at least two receive queues and two transmit queues..." Instead, the cited passage teaches "each logical host channel **adapter** 1282-1286 may have a plurality of queue pairs." Therefore Arndt teaches, as illustrated in Figure 12, "a plurality of queue pairs are contained in the Logical Host Channel Adapters 1282 - 1286, not the Logical Partitions 1234, 1238 and 1242.". Figure 12 further illustrates each Logical Partition only has one queue pair. Furthermore, paragraph [0131] in referring to Figure 12, further explains the operation of the Logical Host Channel adapters in relation to the Logical Partitions 1234, 1238 and 1242 in a manner that would indicate that it would illogical to have more than one queue pair in a logical partition. For example, paragraph [0131] discloses:

"In order to direct incoming data packets to an appropriate logical partition in the HCA and to direct outgoing data packets to an appropriate physical port from logical partitions, each logical partition includes a logical HCA 1282-1286 with logical ports, logical switches 1292-1294 associated with physical ports 1210-1220, and a logical switch control point within the subnet management agent 1250. The subnet manager is capable of assigning unique logical identifiers (LIDs) and global identifiers (GIDs) to the logical HCA ports, and the hypervisor updates queue pair facilities to associate **each queue pair** with a LID and GID. **The hypervisor 1260 maintains one or more tables that identify the unique LIDs, GIDs, and physical port numbers for the resources of each logical partition.**" (emphasis added).

Therefore, *Arndt* does not teach "employing at least two receive queues and two transmit queues; and at least one of transferring a frame or packet from the transmit queue of one of the plurality of partitions..."

The Office Action also concedes *Arndt* and *Fernandes* fails to disclose "at least one of transferring a frame or packet from the transmit queue of one of the plurality of partitions to the adapter cache memory, and transferring a frame or packet from the adapter to the receive queue of one of the plurality of partitions," as recited, for example, in claim 10. Therefore, the Office Action further relies on the citations to *Gioquindo* and *Schmidt* to teach these features. In particular the Office Action relies on *Schmidt* to teach "transferring a frame or packet from the adapter to the receive queue of one of the plurality of partitions," by citing the Abstract. However, the cited passage actually discloses "...send queue and IP address key to locate the receive queue, and sends the data in the send queue in the first logical partition to the receive queue in the second logical partition." (*Schmidt* Abstract). Notice the cited passage fails to disclose "transferring a frame or packet from the **adapter** to the receive queue," as recited in claim 10, for example.

Gioquindo fails to cure the deficiencies of *Schmidt* and *Arndt*. Also, the citation to *Fernandes*, cited for various other features, does not add anything that would remedy the aforementioned deficiency in the combination of *Schmidt*, *Arndt* and *Gioquindo*. Thus, even in view of the knowledge of one of ordinary skill in the art, the asserted combination is deficient.

Accordingly, favorable reconsideration and withdrawal of the rejection of independent claims 10 and 26 and dependent claims 11 and 27 under 35 U.S.C. § 103 are respectfully requested.

E. Claims 12-16 and 28-34 are rejected under 35 U.S.C. 103(a) as being unpatentable in view of *Fernandes* and further in view of *Gioquindo* and further in view of U.S. Patent Publication No. 2003/0023826 to *McMicheal et al.* (hereinafter "*McMicheal*").

The Office Action asserts that *Gioquindo* is "admitted prior art," however the Applicant respectfully submits that no such admission has been made. Applicant respectfully request that the Examiner retract this statement.

The Office Action concedes *Fernandes* and *Gioquindo* does not disclose "...selecting, via a partition management tool included on one of the partitions, the partition to share the adapter," as recited, for example, in claim 12. The Office Action relies on the Abstract of *McMichael* to teach these features. However, the Abstract of *McMichael* simply teaches "a partition manager ... assigning partition on a connected device to volume managers which create the logical volumes, and by removing the assignment when the device is disconnect or reconfigured..." (see *McMichael* Abstract). Thus, the cited passage fails to teach "a partition management tool **included** on one of the partitions..." as recited for example, in claim 12. Furthermore, Figure 2A clearly illustrates the partition manager 201 is a separate device from Partitions 0 - 3 (215-218). Similarly the associated text in Paragraph [0034] discloses "FIG. 2A shows ... a partition management subsystem 200, executing **in a computer** such as a local computer 20 **or remote computer** 49 in FIG. 1, to manage partitions..." (emphasis added). Therefore, *McMichael* fails to teach the features of the claim invention.

The citation to *Gioquindo*, for reasons similar to those discussed above, does not remedy the aforementioned deficiency in *Fernandes*. Thus, even in view of the knowledge of one of ordinary skill in the art, the asserted combination is deficient.

Accordingly, favorable reconsideration and withdrawal of the rejection of independent claims 12-16 and 28-34 under 35 U.S.C. § 103 are respectfully requested.

F. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable in view of *Gioquindo* in view of *Yamaguchi* and further in view of *Fernandes*.

The Office Action asserts that *Gioquindo* is "admitted prior art," however the Applicant respectfully submits that no such admission has been made. Applicant respectfully request that the Examiner retract this statement.

Claim 35 depends from Claim 1 and is patentable for at least the reasons recited in section "**A.**" above. The citations to *Gioquindo* and *Fernandes*, for reasons similar to those discussed above (e.g. sections "**A.** and **C.**"), do not remedy the aforementioned deficiency in *Yamaguchi*. Thus, even in view of the knowledge of one of ordinary skill in the art, the asserted combination is deficient.

Accordingly, favorable reconsideration and withdrawal of the rejection of claim 35 under 35 U.S.C. § 103 are respectfully requested.

G. Claims 17 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,564,040 to *Kubala* (hereinafter *Kubala*) in view of *Yamaguchi* and further in view of *Gioquindo*.

The Office Action asserts that *Kubala* is "admitted prior art," however the Applicant respectfully submits that no such admission has been made. Applicant respectfully request that the Examiner retract this statement.

The Office Action concedes *Kubala* does not specifically disclose "transferring via a processor including executable code that is usable to send partition information from a partition

management tool to a hosting partition" as is generally recited in independent claim 17. Therefore the Office Action relies on *Gioquindo* and *Yamaguchi* to teach these features. However, the citations to *Gioquindo* and *Yamaguchi*, for reasons similar to those discussed in sections "A. and C." above, do not remedy the aforementioned deficiency in *Kubala*. Thus, even in view of the knowledge of one of ordinary skill in the art, the asserted combination is deficient.

Accordingly, favorable reconsideration and withdrawal of the rejection of independent claims 17 and 19-21 under 35 U.S.C. § 103 are respectfully requested.

H. Claims 18 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Kubala* in view of *Yamaguchi* and further in view of *Gioquindo* and further in view of U.S. Patent Publication No. 2003/0149844 to *Duncan et al.* (hereinafter "*Duncan*").

The Office Action asserts that *Kubala* is "admitted prior art," however Applicant respectfully submits that no such admission has been made. Applicant respectfully request that the Examiner retract this statement.

Claims 18 and 39 depend directly or indirectly from claim 17. The rejection of claim 17 is traversed in the discussion under section "G." above. *Duncan* fails to cure the deficiencies of *Kubala*, *Yamaguchi* and *Gioquindo*, therefore, it is respectfully submitted that claims 18 and 39 are also in condition for allowance. Accordingly, favorable reconsideration and withdrawal of the rejection of claims 18 and 39 under 35 U.S.C. § 103 are respectfully requested.

I. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Kubala* in view of *Yamaguchi* and further in view of *Gioquindo* and further in view of *Fernandes*.

The Office Action asserts that *Kubala* is "admitted prior art," however the Applicant respectfully submits that no such admission has been made. Applicant respectfully request that the Examiner retract this statement.

Claim 38 depends from claim 17. The rejection of claim 17 is traversed in the discussion under section "G." above. *Fernandes* fails to cure the deficiencies of *Kubala*, *Yamaguchi* and *Gioquindo*, therefore, it is respectfully submitted that claim 38 is also in condition for allowance. Accordingly, favorable reconsideration and withdrawal of the rejection of claim 38 under 35 U.S.C. § 103 are respectfully requested.

J. In sum, none of the asserted citations, alone or in combination, teaches or suggests at least the aforementioned features of the amended independent claims. Accordingly, without conceding the propriety of the asserted combinations, the asserted combinations are likewise deficient, even in view of the knowledge of one of ordinary skill in the art.

II. CONCLUSION

Since the Applicants assert that all the independent claims are in condition for allowance and all remaining claims properly depend from the independent claims, Applicants assert that all claims are allowable.

Applicants Request a Two Month Extension of Time. Applicants do not believe any additional fees are due regarding this Amendment. However, if any additional fees are required, please charge Deposit Account No. 04-1696.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Steven M. Santisi".

Dated: September 30, 2008
Hawthorne, New York

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